



Sandia's Approach to On-Site Preventive Health

Rob Nelson

**Sandia National Laboratories (HBE)
Health, Benefits and Employee Services**



Biography

Rob Nelson is the Manager of Healthcare and Support Services at Sandia National Laboratories in Albuquerque, NM. Rob has been at Sandia since 2005. Prior to Sandia, Rob worked as the Chief Information Officer for a large US financial services company. Rob's work at Sandia has focused on creating ways to tell Sandia's healthcare story through numbers and finding ways to focus preventive programs on the areas that matter the most.

What is a comprehensive corporate healthcare experience?

Measure success by clinical outcomes of onsite and offsite services and let the data drive the ROI and mold program decisions.

What data do you need to capture?



Comprehensive Healthcare

Employer Managed

Onsite + Offsite Healthcare Plan Services

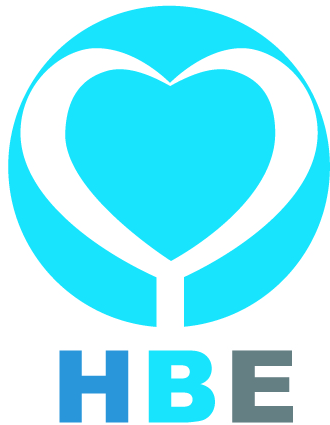
= Better health outcomes, lower cost and a higher standard of continuous care

when

Targeted by real data to the specific, present and predictable, evidence-based needs of the covered populations

A Little Bit About HBE

Sandia is a DOE national laboratory dedicated to helping our nation secure a peaceful and free world through technology.



**Health
Benefits
Employee Services**

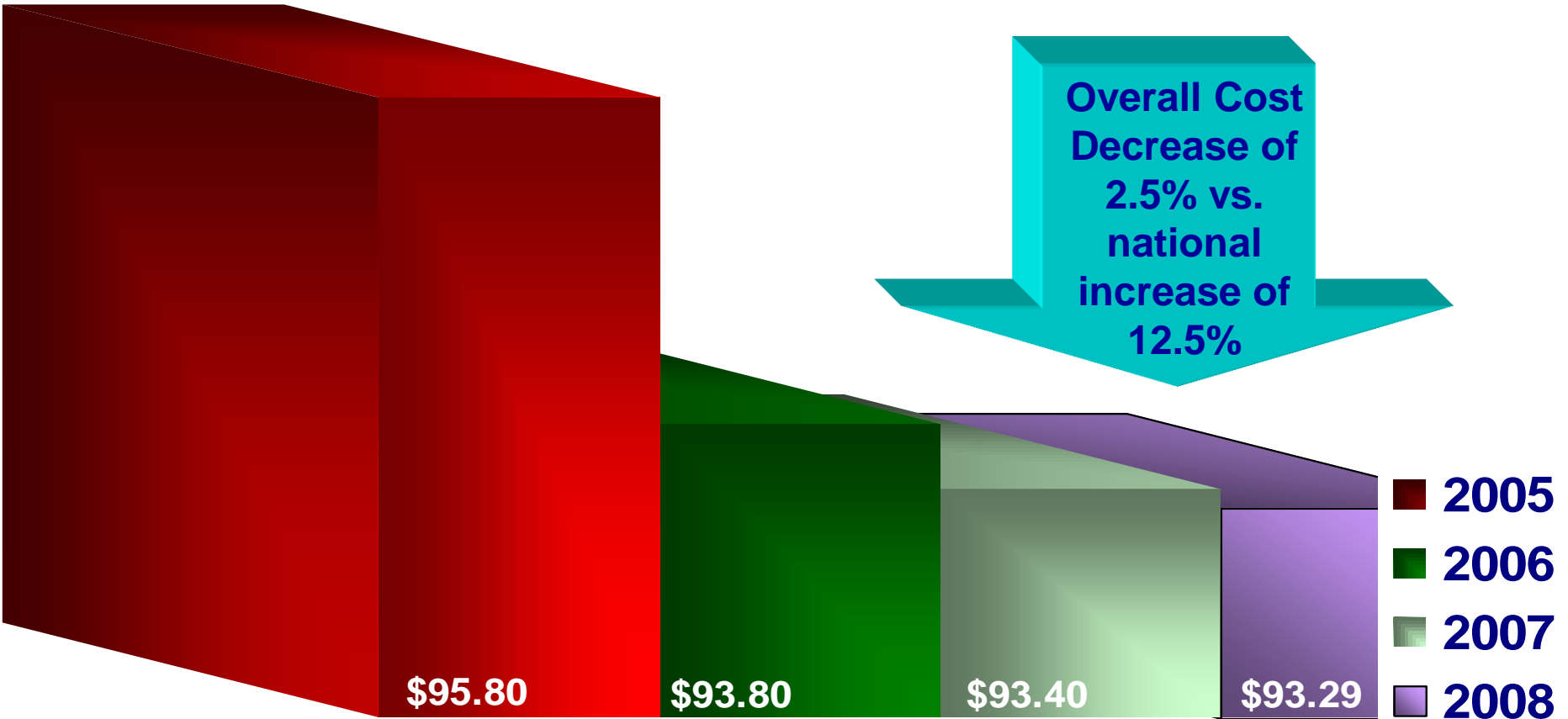
Onsite corporate health clinics reside in the same organization as our healthcare benefits plans

Budget of \$9.8 million

Self-insured corporation

Sandia Beats Rising Healthcare Cost Trends

Fiscal Year Costs (\$million)



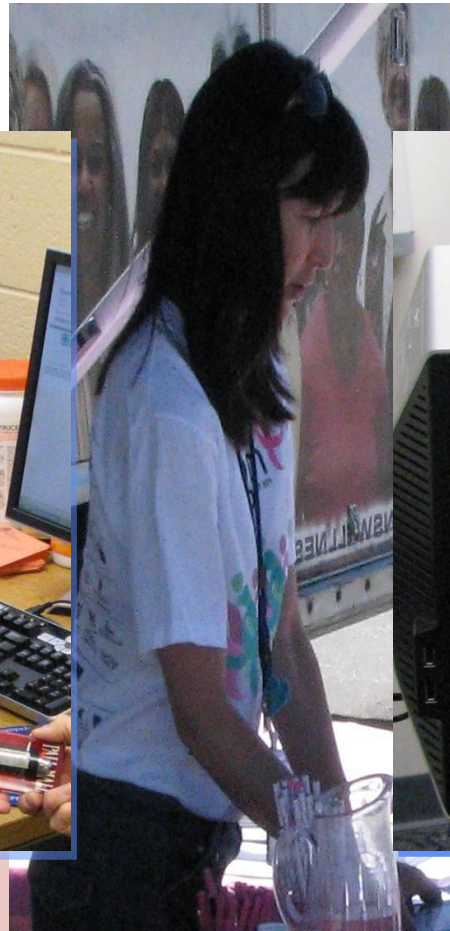
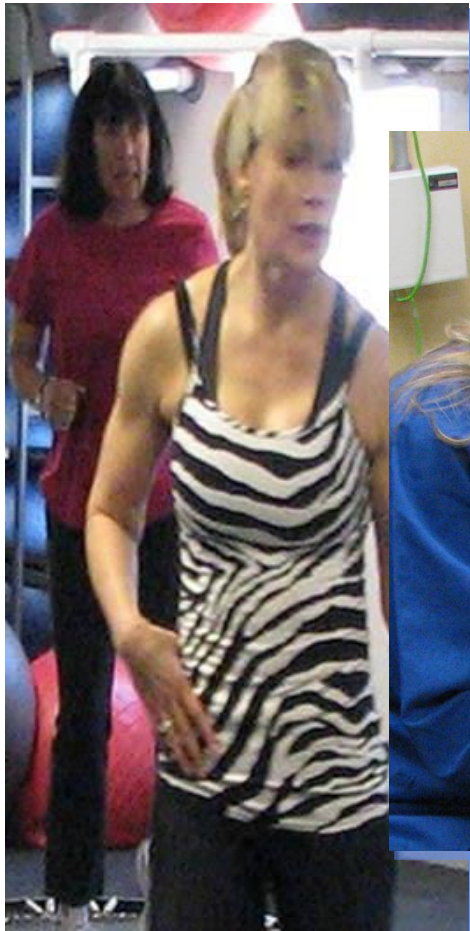
Source: Sandia accounting reports

NOTE: These costs are subject on a total dollar basis (not PEPPY, as shown under benchmark data), and are subject to accounting entry timing, but are nonetheless generally indicative of overall Sandia trends.

Sandia National Laboratories
Health, Benefits, and Employee Services
<http://hbe.sandia.gov>

The HBE Team

Multidisciplinary team of healthcare professionals, health educators, dietitians, exercise, and contract specialists, doctors, nurses, case managers, community providers, data systems and communications unified by a commitment to provide the best in evidence-based health care.






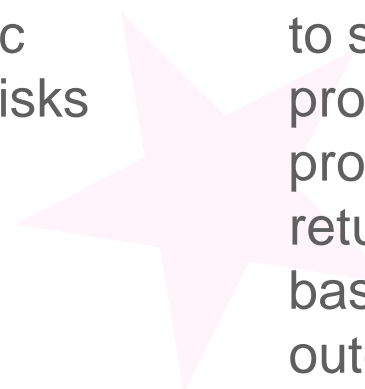

The Practice

Remove barriers to diagnosis and treatment, and provide convenient access to health care, patient education, and work closely with physicians and the healthcare plans

Capture the data
from healthcare plan
claims, onsite clinic
visits, and health risks
of the populations

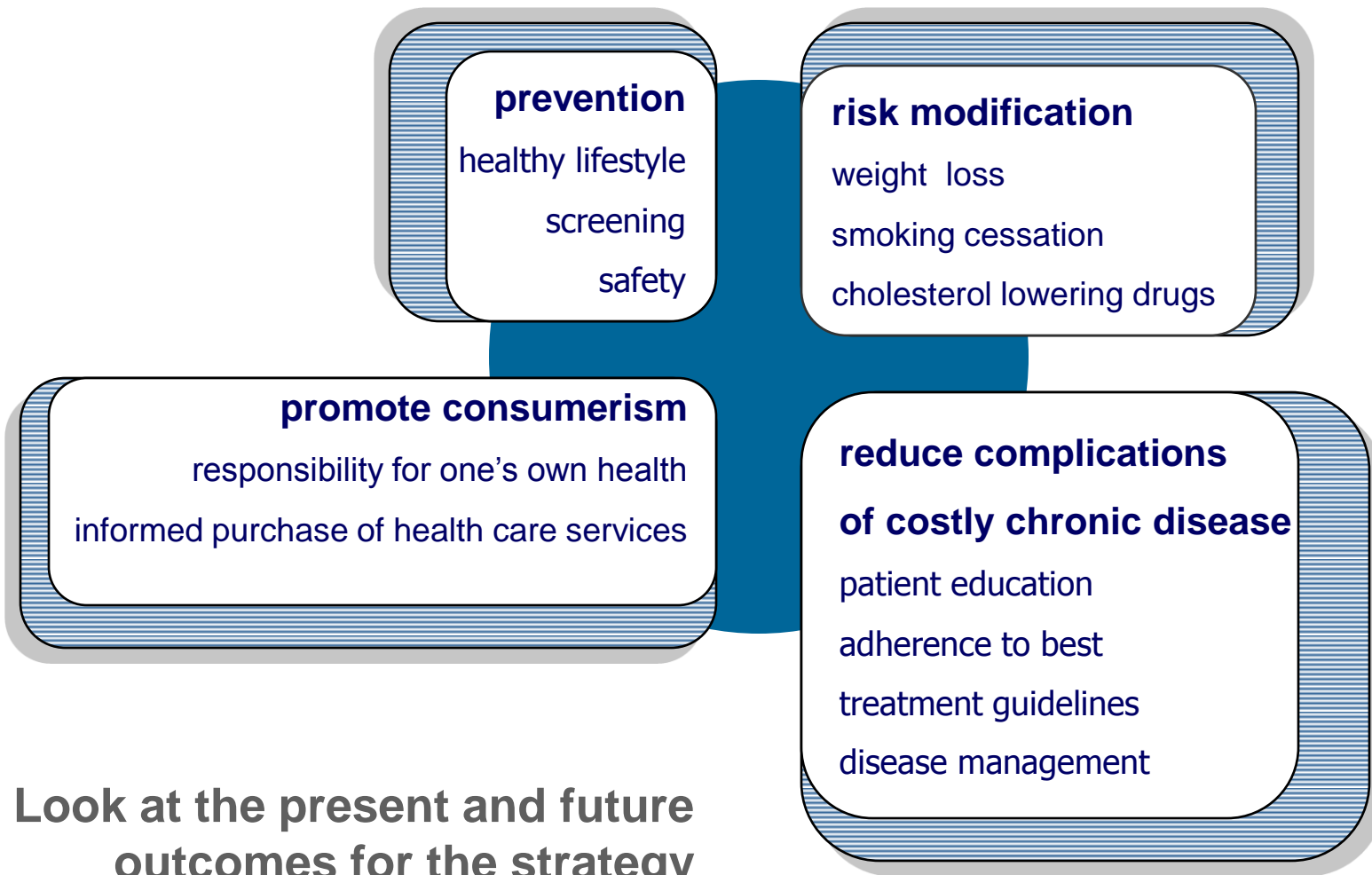


**Analyze outcome
measures and data**
to show that the
programs work and
provide a quantifiable
return on investment
based on clinical
outcome





Comprehensive Long Term Strategy to Control Cost Trends



**Look at the present and future
outcomes for the strategy**



Look at the Populations

Who are the covered populations and how much does their health cost now and in the future?

- Health Risk Assessment Data
- Onsite Clinical Services Usage Data
- Healthcare Plans Claims Data
- Offsite Medical Services Usage Data
- Evidence-based Prevention and Predictive Data

Measure the programs by the same outcome standards

Know Your Employees

About 9272 employees

- Very low turnover
- Average age is 48
 - 70% male

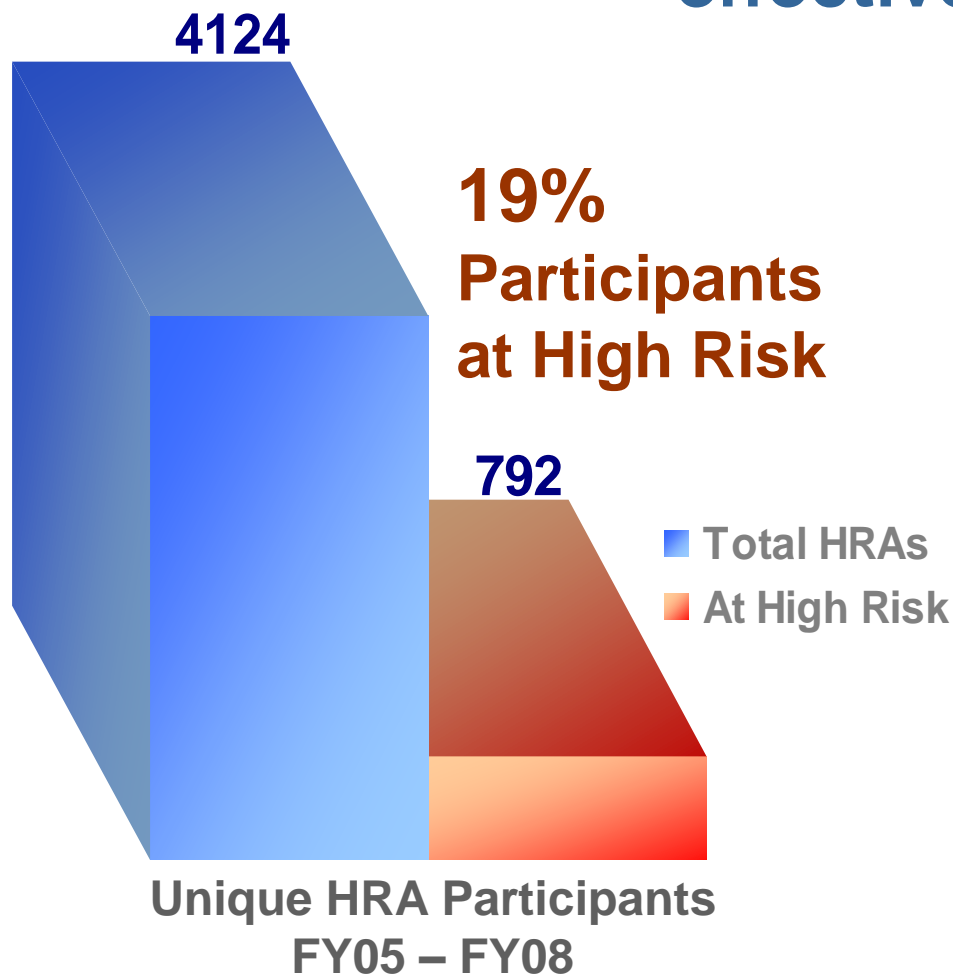
**31,706 lives covered
by our healthcare
plans (spouses,
dependents,
retirees, survivors)**



Using HRA data to measure program effectiveness

Leading Indicator:

The total number of elevated risk factors (5 or greater) is a good predictor of future health problems, healthcare utilization, and health care costs of both individuals and populations



Advanced Data Analytics

19.99% of insured lives had a cancer claim in 2008 = 1 in 5

5597 unique claimants / 28000 insured lives (including dependents, spouses,

Diagnosis Category	Metrics	Benefits Paid - Sum	Visits - Count	Total Unique Claimants
Ca of Head And Neck		\$211,369	96	5,597
Ca of Esophagus		\$9,372	18	5,597
Ca of Stomach		\$20,289	27	5,597
Ca of Colon		\$428,556	432	5,597
Ca of Rectum And Anus		\$74,706	137	5,597
Ca Liver/Hepatic Bile Duct		\$202,505	49	5,597
Ca of Pancreas		\$225,210	232	5,597
Ca GI Organs Peritoneum		\$37,806	43	5,597
Ca of Bronchus Lung		\$622,788	418	5,597
Ca Oth Resp/Intrathoracic		\$6,855	8	5,597
Ca Bone/Connective Tissue		\$168,084	124	5,597
Melanomas of Skin		\$118,127	166	5,597
Skin Ca Non Epithelial		\$300,518	637	5,597
Ca of Breast		\$1,402,837	1,379	5,597
Ca of Uterus		\$47,236	52	5,597
Ca of Cervix		\$23,743	58	5,597
Ca of Ovary		\$22,530	92	5,597
Ca Oth Female Genital Organ		\$4,590	39	5,597
Ca of Prostate		\$494,461	882	5,597
Ca of Testis		\$12,986	13	5,597
Ca of Bladder		\$57,814	160	5,597
Ca of Kidney/Renal Pelvis		\$121,574	88	5,597
Ca Oth Urinary Organ		\$1,822	2	5,597

Own your healthcare claims data

Look for prevention opportunities

Opportunity to reduce Breast Cancer claims

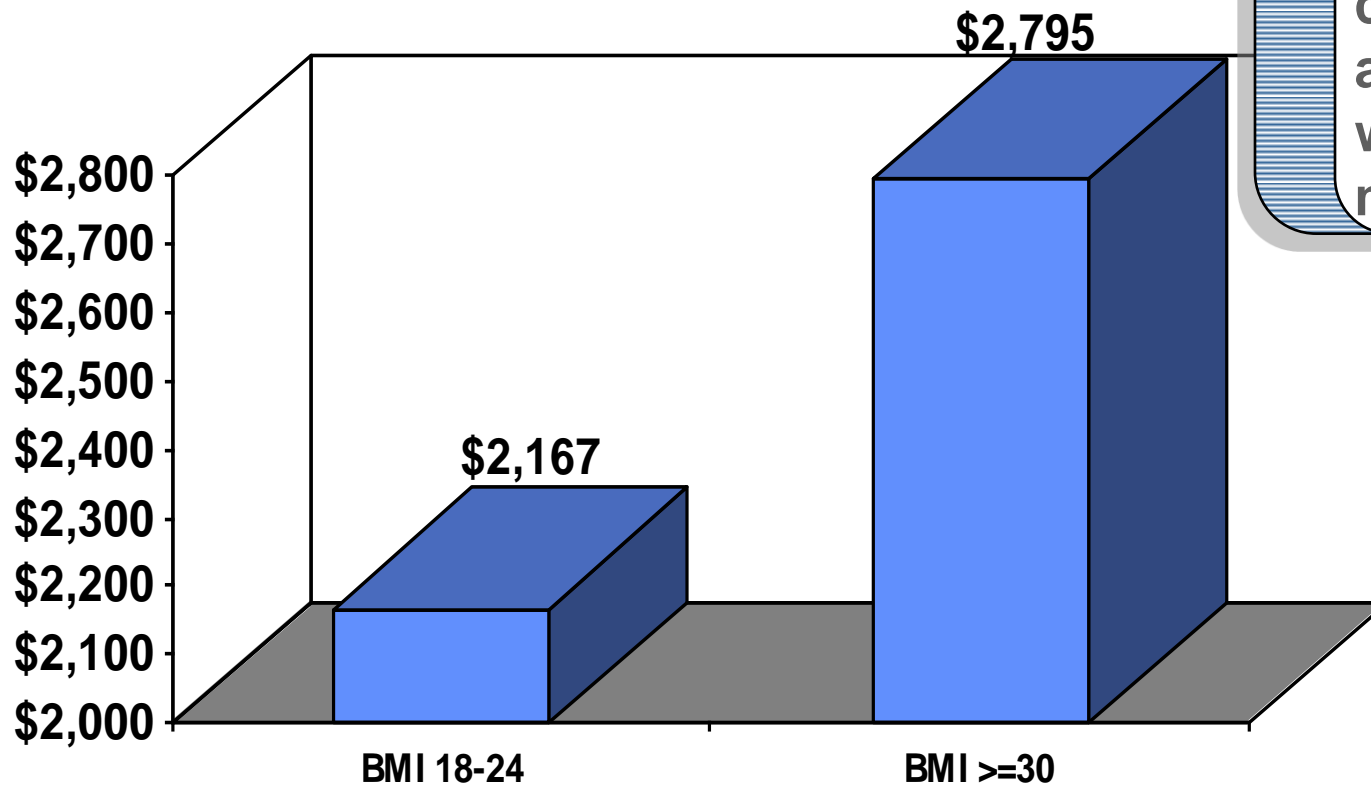
Look Deep into the Data

Is our population adhering to
mammography recommendations?



Organizational Health Data aligned with Healthcare Plan Claims Data

Claims cost per person



29%

higher claims costs are attributed to those with a BMI of 30 or more



Population based management using key risk factors (n=2589)

71%

Do not engage
in an optimal
level of regular
exercise

Are not
getting
adequate
rest

46%

64%

Either
overweight
or obese

Stress, anxiety
or depression
is negatively
impacting their
work

34%

Episode Risk Grouping (ERG)

Male, Age 58 – Prospective Risk Score, Commercial

ETG	ERG	Weight
027 – Insulin dependent diabetes, with co-morbidity	02.01 – Insulin dependent diabetes, with co-morbidity	1.893
267 – CHF, w co-morbidity	08.03 – CHF	3.448
438 – Ulcer, simple	11.01 – Ulcer	0.734
678 – Minor inflammation of skin	17.01 – Lower cost <u>derm</u> , I	0.076
Age-Sex	Age-Sex Group	
Male, 58	Males, 55 to 64	0.833
Total Prospective Risk Score		6.984

Note: Commercial, non-elderly ERG model.

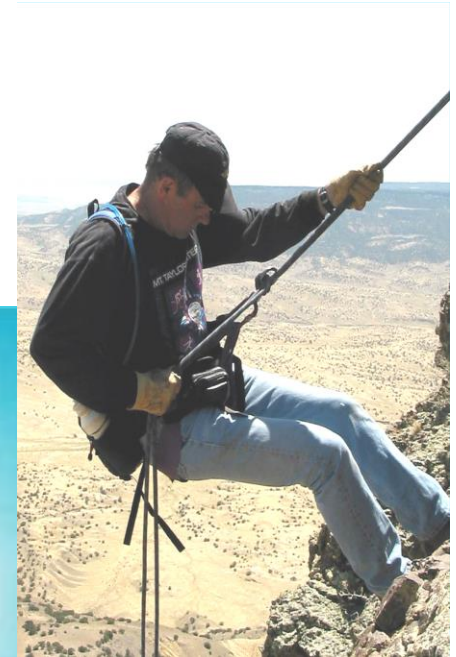
Episode Risk Grouping (ERGs) is a risk assessment model which generates a relative risk score for each member of the population. Individual scores can be rolled up to create relative risk scores for groups (e.g., business units, locations).

A risk score of 1.0 indicates “average” risk.

Why deliver medical services at the workplace?

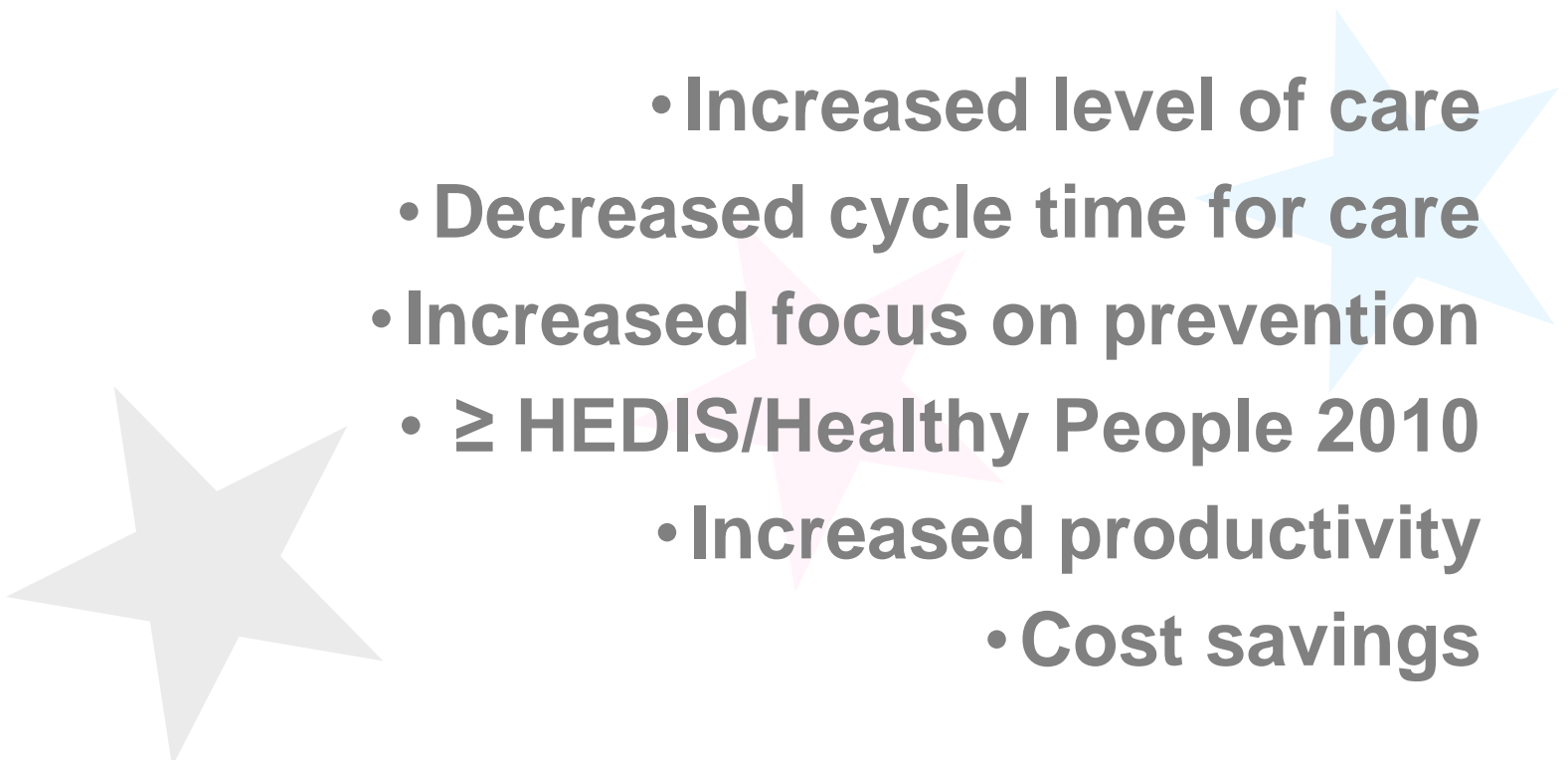
Increased opportunity to target high risk individuals through mandatory surveillance exams and provide workplace access to care

Integrated disability management blurs the line between occupational and non-occupational illnesses and injuries – the real costs are in non-occupational cases





Benefits of Integrating Health Promotion and Disease Management with Occupational Medicine

- 
- Increased level of care
 - Decreased cycle time for care
 - Increased focus on prevention
 - \geq HEDIS/Healthy People 2010
 - Increased productivity
 - Cost savings



Making the Business Case for an Onsite Clinic Save Lost Time FY08 Cost Savings

HBE Onsite Clinics

39,191 visits

(not including Preventive and EAP)

If you assume 1 – 2 hours time away from work
at an average salary band
total savings to Sandia would be

\$2,208,099 - \$4,416,199

Why focus on prevention and disease management?

“Employers can see a return of \$3 to \$6 for each dollar spent over two to five years on workplace health program strategies.”

American Journal of Preventive Medicine, December 2005



What does the research show about lifestyle factors?



Lifestyle habits account for half of all premature deaths

Are the primary cause of six of the top ten causes of death

Accelerate the onset of disability by nearly a decade

Account for a quarter to half of medical care costs



Preventive Medicine Identifies

THE WELL

Nutrition services

Fitness services

Stress Management

Ergonomics/Back Care

Workgroup Programs



DISEASE RISK

Diabetes

Hypertension

Hyperlipidemia

Obesity

Nicotine Addiction



Health Promotion Program Budget FY08

Operating Budget
FY08: \$583,673

Cost per participant
(n= 4219)
per year \$138

Cost per employee
per year \$63





Disease Management Program Evolution

Lipid and
Hypertension
Clinics
2004

Obesity Clinic
Pilot Program
2006

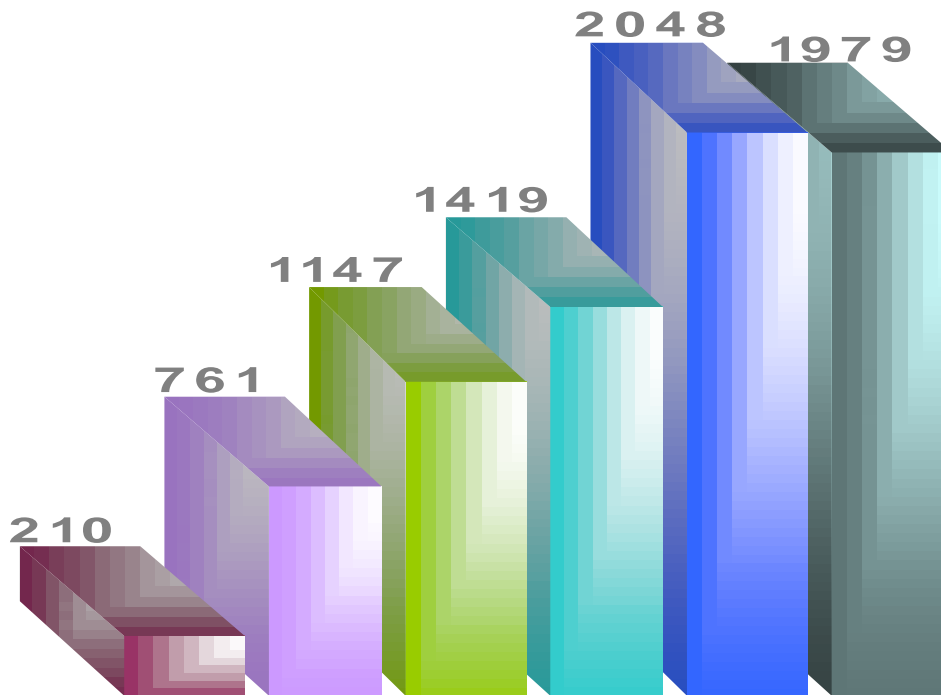
Depression
Clinic
2009

Diabetes Pilot
Program
2001

Supervised
Exercise
Program
2005

Smoking
Cessation
2006

Disease Management Program



Proven to positively influence the health, productivity and quality of life of the **1,979** program participants.

PILOT FY04 FY05 FY06 FY07 FY08

**Sandia's Diabetes Clinic Pilot Program
opened July 2001**



Healthy People 2010 Goals

DMC - Diabetes Results

Increase the number of participants who receive formal diabetes education. (SNL Certified Diabetes Educator-CDE)

Increase the number of participants who have at least an annual foot exam. (SNL Podiatrist)

Increase the number of participants who have an A1c measurement at least once a year.

CDE

Podiatry

A1c

Healthy People 2010 Goal (2005 Mid-Review)	Sandia Achievement <u>FY06 (CY05/CY04)</u>
60% (45)	66% (79/86)
75% (68)	76% (80/92)
65% (59)	86% (87/97)



DMC Mission Success

Pre/Post A1c Results

A1c Level	Pre A1c N (% Pop)	Post A1c N (% Pop)	% Percent Change
<7.0%	109 (57%)	121 (63%)	10% Increase
7.0-9.0%	50 (26%)	58 (30%)	14% Increase
>9.0%	32 (17%)	12 (6%)	63% Decrease



Diabetes HEDIS Standards

Diabetes Standards	DMC	CIGNA	United	National
Annual A1C	86%	73%	87%	87%
Poor Control >9.0%	6%	55%	41%	31%
Annual LDL	85%	73%	91%	92%
Good Control LDL <130	92%	48%	62%	68%
Optimal Control LDL <100	67%	-	41%	44%
Annual Eye Exam	35%	38%	49%	55%
Annual Kidney Screen	57%	51%	54%	55%



Sandia DMC Clinic Cost Savings for FY06

Make or Buy CPT Comparison	\$	1,954,048
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Improved Health Outcomes	\$	1,852,415
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Travel Time Saved Secondary to Services On-site	\$	584,635
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Total	\$	4,391,098
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Sandia DMC Clinic Return on Investment

1 : 3.64

For every \$1.00 spent on Sandia's DMC, a savings of \$3.64 is realized.



Sample metrics for onsite services YTD through Q2 FY09

Onsite service(s)	Total cost	Cost / capita	# of visits YTD FY09	# of patients YTD FY09	CSAT	
Disease Management Clinic	\$502K	\$54	6,987	1,821	9.24	
Preventive Health Services	\$261K	\$28	12,762	2,708	9.31	
Personal Healthcare	\$1.2M	\$129	7,227	3,323	8.94	
Physical Therapy	\$235K	\$25	2,325	400	9.42	

Visit us on the web at <http://hbe.sandia.gov>

Healthcare Cost Containment – think prevention

https://hbeupdate.custhelp.com/app/answers/detail/a_id/973

Why employers provide on-site health clinics

https://hbeupdate.custhelp.com/app/answers/detail/a_id/866

One in Three – coming to work with undiagnosed hypertension

https://hbeupdate.custhelp.com/app/answers/detail/a_id/1235

One in Five – Sandia community treated for cancer

https://hbeupdate.custhelp.com/app/answers/detail/a_id/1309